

WHAT IS CLAIMED IS:

1. A license issuance server for issuing a license for execution of software, comprising:

5 software encryption key generating means, responsive to an encryption key generation request for the software, for generating a software encryption key and a software decryption key for decrypting the software encrypted using the software encryption key; and

10 license issuing means, responsive to a license issue request including device identification information fixedly recorded on a recording medium in a processing device which is a target of permission to run the software, for encrypting the software decryption key by using the
15 device identification information and outputting a software license including the encrypted software decryption key.

2. The license issuance server according to claim 1, wherein, if the encryption key generation request is
20 received from a different computer connected via a network, said software encryption key generating means transmits the generated software encryption key to said different computer.

3. The license issuance server according to claim
25 1, wherein, if the license issue request is received from a different computer connected via a network, said license issuing means transmits the generated software license to

said different computer.

4. A software provision server for providing software whose execution is to be restricted by a license,
5 comprising:

software encryption key generating means, responsive to an encryption key generation request for the software, for generating a software encryption key and a software decryption key for decrypting the software
10 encrypted using the software encryption key;

software encrypting means for encrypting the software by using the software encryption key generated by said software encryption key generating means;

software providing means, responsive to input of a
15 software request which is received from a processing device as a target of permission to run the software and which includes device identification information fixedly recorded on a recording medium in the processing device, for transmitting the software encrypted by said software
20 encrypting means to the processing device; and

license issuing means, responsive to input of the software request from the processing device, for encrypting the software decryption key by using the device identification information and outputting a software license
25 including the encrypted software decryption key to the processing device.

5. A processing device for executing software whose execution is restricted by a license, comprising:

a recording medium on which device identification information is fixedly recorded;

5 decryption key decrypting means, responsive to reception of a software decryption key which has been encrypted, for decrypting the software decryption key by using the device identification information recorded on said recording medium as a decryption key; and

10 software decrypting means, responsive to reception from a software provision server of the software which has been encrypted, for decrypting the software by using the software decryption key decrypted by said decryption key decrypting means as a decryption key.

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6. A license issuance server for issuing a license for execution of software, comprising:

attach/detach key information issuing means, responsive to an attach/detach key information generation request including device identification information fixedly recorded on a recording medium in a processing device which is a target of permission to run the software, for generating attach/detach key information including the device identification information and an attach/detach key-specific encryption key, and recording the generated attach/detach key information on a hardware key which can be attached to and detached from the processing device; and

license issuing means, responsive to a license
issue request for the software, for encrypting a software
decryption key for decrypting the software which is provided
in an encrypted state, by using the attach/detach key-
5 specific encryption key, and outputting license information
including the encrypted software decryption key.

7. The license issuance server according to claim
6, wherein said license issuing means includes, in the
10 license information, a license count indicating a number of
devices permitted to simultaneously execute the software.

8. The license issuance server according to claim
6, wherein said hardware key has tamper resistance.
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9. The license issuance server according to claim
6, wherein said license issuing means encrypts the license
information before outputting same.

20 10. The license issuance server according to
claim 9, wherein said license issuing means encrypts the
license information by using the attach/detach key-specific
encryption key.

25 11. The license issuance server according to
claim 6, further comprising license issue charge calculating
means for storing past records on the license information

output from said license issuing means, and calculating, based on the stored license information, a license issue charge to be billed to a provider of the software.

5 12. A software provision server for providing software whose execution is to be restricted by a license, comprising:

attach/detach key information issuing means, responsive to an attach/detach key information generation request including device identification information fixedly recorded on a recording medium in a processing device which is a target of permission to run the software, for generating attach/detach key information including the device identification information and an attach/detach key-specific encryption key, and recording the generated attach/detach key information on a hardware key which can be attached to and detached from the processing device;

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software encryption key generating means for generating a software encryption key for encrypting and decrypting the software, and a software decryption key for decrypting data encrypted by using the software encryption key;

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software encrypting means for encrypting the software by using the software encryption key generated by said software encryption key generating means;

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software providing means, responsive to input of a software request from the processing device, for

transmitting the software encrypted by said software
encrypting means to the processing device; and

license issuing means, responsive to a license
issue request for the software, for encrypting the software
5 decryption key by using the attach/detach key-specific
encryption key, and outputting license information including
the encrypted software decryption key.

13. A processing device for executing software
10 whose execution is restricted by a license, comprising:

a recording medium on which device identification
information is fixedly recorded;

hardware key connecting means for reading
attach/detach key information including an attach/detach
15 key-specific encryption key and permission target device
identification information specifying a device which is a
target of permission to run the software, from a hardware
key storing the attach/detach key information when the
hardware key is attached;

20 software key decrypting means, responsive to input
of license information including an encrypted software
decryption key for decrypting the software which has been
encrypted, for decrypting the software decryption key by
using the attach/detach key-specific encryption key;

25 identification information determining means for
determining sameness of the permission target device
identification information included in the hardware key

attached to said hardware key connecting means with the device identification information recorded on said recording medium; and

software decrypting means for decrypting the
5 encrypted software by using the software decryption key decrypted by said software key decrypting means if the sameness is confirmed by said identification information determining means.

10 14. A software execution management device for managing status of execution of software whose execution is restricted by a license, comprising:

a recording medium on which device identification information is fixedly recorded;

15 hardware key connecting means for reading attach/detach key information including an attach/detach key-specific encryption key and permission target device identification information specifying a device which is a target of permission to run the software, from a hardware
20 key storing the attach/detach key information when the hardware key is attached;

software key decrypting means, responsive to input of license information including an encrypted software decryption key for decrypting the software which has been
25 encrypted and a number of computers permitted to execute the software simultaneously, for decrypting the software decryption key by using the attach/detach key-specific

encryption key; and

decryption key managing means for monitoring computers connected via a network to detect a number of computers executing the software, and transferring the software decryption key decrypted by said software key
5 decrypting means to a number of computers equal to or smaller than the number of computers permitted to execute the software simultaneously.

10 15. A license issuing method for issuing a license for execution of software, comprising the steps of:

generating, in response to an encryption key generation request for the software, a software encryption key and a software decryption key for decrypting the
15 software encrypted by using the software encryption key; and

encrypting, in response to a license issue request including device identification information fixedly recorded on a recording medium in a processing device which is a target of permission to run the software, the software
20 decryption key by using the device identification information, and outputting a software license including the encrypted software decryption key.

16. A license issuing method for issuing a
25 license for execution of software, comprising the steps of:

generating, in response to an attach/detach key information generation request including device

identification information fixedly recorded on a recording medium in a processing device which is a target of permission to run the software, attach/detach key information including the device identification information and an attach/detach key-specific encryption key, and recording the generated attach/detach key information on a hardware key which can be attached to and detached from the processing device; and

encrypting, in response to a license issue request for the software, a software decryption key for decrypting the software provided in an encrypted state, by using the attach/detach key-specific encryption key, and outputting license information including the encrypted software decryption key.

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17. A license issuing program for issuing a license for execution of software, wherein said license issuing program causes a computer to perform the processes of:

20 generating, in response to an encryption key generation request for the software, a software encryption key and a software decryption key for decrypting the software encrypted by using the software encryption key; and

encrypting, in response to a license issue request including device identification information fixedly recorded on a recording medium in a processing device which is a target of permission to run the software, the software

decryption key by using the device identification information, and outputting a software license including the encrypted software decryption key.

5 18. A license issuing program for issuing a license for execution of software, wherein said license issuing program causes a computer to perform the processes of:

generating, in response to an attach/detach key
10 information generation request including device identification information fixedly recorded on a recording medium in a processing device which is a target of permission to run the software, attach/detach key information including the device identification information
15 and an attach/detach key-specific encryption key, and recording the generated attach/detach key information on a hardware key which can be attached to and detached from the processing device; and

encrypting, in response to a license issue request
20 for the software, a software decryption key for decrypting the software provided in an encrypted state, by using the attach/detach key-specific encryption key, and outputting license information including the encrypted software decryption key.

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19. A computer-readable recording medium recording a license issuing program for issuing a license

for execution of software, wherein the license issuing program causes the computer to perform the processes of:

generating, in response to an encryption key generation request for the software, a software encryption key and a software decryption key for decrypting the software encrypted by using the software encryption key; and
5 encrypting, in response to a license issue request including device identification information fixedly recorded on a recording medium in a processing device which is a target of permission to run the software, the software decryption key by using the device identification information, and outputting a software license including the encrypted software decryption key.
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15 20. A computer-readable recording medium recording a license issuing program for issuing a license for execution of software, wherein the license issuing program causes the computer to perform the processes of:

generating, in response to an attach/detach key information generation request including device identification information fixedly recorded on a recording medium in a processing device which is a target of permission to run the software, attach/detach key information including the device identification information
20 and an attach/detach key-specific encryption key, and recording the generated attach/detach key information on a hardware key which can be attached to and detached from the
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processing device; and

encrypting, in response to a license issue request for the software, a software decryption key for decrypting the software provided in an encrypted state, by using the
5 attach/detach key-specific encryption key, and outputting license information including the encrypted software decryption key.